

MANUFACTURING EXTENSION PARTNERSHIP

Success Stories from the Field

Electromech Technologies

Mid-America Manufacturing Technology Center

Electromech Technologies

Client Profile:

Electromech Technologies, located in Wichita, Kansas, is a leader in the application of motors, blowers and actuators for the aerospace and defense industries. Established in 1968, the company currently employs 180 people.

Situation:

Electromech Technologies needed to conduct FMEA studies to verify and certify its products conformance to FAA requirements. Additionally, FMEA studies would reveal what improvements could be made to products for additional marketability. Electromech Technologies contacted the Mid-America Manufacturing Technology Center (MAMTC), a NIST MEP affiliate, for help.

Solution:

MAMTC conducted six FMEA studies during a month period. The analysis included looking at failure modes in a piece part manner, and then associating those failure modes with system failure modes. The reliability analysis included random failure rates per million hours of use, correlated to several system failure modes to calculate a random failure rate for the product as related to each system failure mode. Electromech was pleased with the results and will use the results to certify that their products meet FAA requirements. Electromech also made changes to some parts based upon the studies outcome to improve product performance and reliability. The company anticipates sales increases of \$20 million to \$50 million.

Results:

- * Certified adherence to FAA requirements.
- * Anticipated sales increase of \$20 million to \$50 million.
- * Improved product performance and reliability.

Testimonial:

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